

JOHN THOMAS BARBER was born at Derby, 1825 July 23, and died at Norwood 1897 March 25. In 1854 he married Jane, eldest daughter of the late Rev. Matthew With. From 1864 till 1883 he lived at Spondon, in Derbyshire, and from 1883 till his death at Hoperay, Aston-on-Clun, Salop. He was of independent means. Mr. Barber took a keen amateur's interest in astronomy from the time when he was an undergraduate at Cambridge. In 1847 he published, together with Mr. J. Morgan, an illustrated account of the Great Aurora on October 24, as seen from the Cambridge Observatory, together with the auroras of 1846 September and 1847 March, and he calculated ephemerides for the return of comets. He set up at Spondon an 8-inch equatorial by Cooke, of York, and made observations with it of a miscellaneous kind ; but the telescope was not re-erected in the unfavourable situation of Aston-on-Clun. He was elected a Fellow of the Society on 1849 December 14.

GUSTAVE ADOLPHE DE BOË was born at Tamise in 1821. His childhood was spent at Douai, with his uncle, and he was educated, first at Lille and then at Brussels. His family lived at Antwerp, whither he returned in 1841, after a year spent in London in acquiring a thorough knowledge of English. It was not until 1858 that his interest in astronomy was awakened by reading Arago's *Astronomie Populaire*, then in course of publication. He was fascinated by what he read, and founded a private observatory at Antwerp (the first of its kind in Belgium), where he made numerous observations, both astronomical and meteorological. Among them may be mentioned the accurate determination of the latitude and longitude of his observatory, and his observations of the Transit of *Mercury* in 1878 and of the Transit of *Venus* in 1882. He was fertile in suggesting ingenious devices : the use of a daguerrotype plate in the mercury-trough ; a simple equatorial mounting ; a method of measuring the magnifying power of a telescope, &c., &c. ; and, finally, perhaps his best work as an astronomer consisted in the interest which his own enthusiasm for the science awakened in others. His observatory (furnished with a 6-inch equatorial by Secretan, a small transit circle, a comet seeker, clocks, &c.) and his well-equipped library were always open to those interested in astronomy ; and he did much by writing in magazines and the daily papers to disseminate a knowledge of the chief facts and most important events.

He was elected a Fellow of the Society on 1881 January 14.

FREDERICK BRODIE was born at Eastbourne, Sussex, on 1823 July 19, and was the youngest son of the Rev. Alexander Brodie, D.D., then Vicar of Eastbourne, a cadet of the ancient Scotch family of Brodie of Brodie, in the county of Nairn. His mother was Anna, daughter of John Walter, M.P., the founder of the *Times*. Mr. Brodie was educated at a private school at

M 2

Eastbourne and at the University of Edinburgh. His inclinations leading him in the direction of civil engineering, he was articled to Mr. J. M. Rendel, and in that capacity took part in the construction of the Chester and Birkenhead Railway. His connection with that undertaking led to his being appointed to a post in India in the early days of the Indian railways (1848), but when everything was settled, and his foreign service kit prepared, the promoters of the railway decided to cut down their expenditure, and Mr. Brodie refused to take up his appointment at a reduced salary. He remained therefore in England, and became Resident Engineer at the Esher Paper Mills, and continued there till he retired from his profession on his marriage, in 1853, with Elizabeth Anne, daughter of Mr. Thomas Fussell, of Wadbury House, Frome, Somersetshire, then the proprietor of the Mells Iron Works. Mr. Brodie erected in the grounds at Wadbury an observatory, proposing to carry on general astronomical work. The death of his wife in the spring of 1854 led him to quit Somersetshire, and the observatory was removed to an excellent site in a field belonging to his mother at Eastbourne, where he resided until after his second marriage, in 1858, to Ada Blanche, third daughter of the late Sir Robert W. Carden, Bart., M.P. He moved to Uckfield, in Sussex, in 1859, where for eighteen years he carried on observations of various kinds. The climate of Uckfield proving unsuited to his wife, who was never well there, Mr. Brodie sold his Uckfield property and bought a larger and better situated house, known as Fernhill, near Wootton, in the Isle of Wight, four miles west of Ryde. He died there on 1896 August 14, leaving, by his second wife, three sons and one daughter, two other children having died young.

Mr. Brodie's first observatory is described in vol. xvi. of the *Monthly Notices*, and was a remarkably successful structure as regards cheapness, lightness, and portability. It was made entirely of deal boards, and in planning it Mr. Brodie's engineering skill and experience stood him in good stead. A specification and plans, as modified by Mr. Brodie himself for the purpose, are given in the third volume of Chambers's *Handbook of Descriptive Astronomy*. The telescope with which Mr. Brodie started his astronomical work was an excellent 6½-inch refractor. The object-glass was by Merz, of Munich, but the tube and mounting were made in England under Mr. Brodie's own superintendence. This telescope was afterwards sold to Sir William Keith Murray, of Ochertyre, N.B., and was replaced by an American object-glass by Alvan Clark, of Boston, U.S., of 7½ inches aperture, which had belonged to Mr. Dawes. On Mr. Brodie settling at Uckfield he sold his observatory and equatorial stand to Mr. C. L. Prince, by whom it was re-erected at Uckfield, the American object-glass being mounted in a new tube and on a new stand supplied by Mr. T. Cooke, of York. When Mr. Brodie broke up his establishment at Uckfield, in 1877, he remained houseless for about a couple of years, in which interval he went out to the

Cape of Good Hope, with some idea of remaining there for a time and carrying out astronomical observations there, but he was disappointed with the climate, and did not stay long in the colony, and eventually settled in the Isle of Wight, as stated above.

Mr. Brodie was a painstaking and accurate astronomical observer, and though his published contributions to our science were few and far between, he left behind him a large mass of memoranda (especially on Sun-spots and star clusters), selections from which might well be given to the world. Born and brought up a member of the Church of England, he quitted the Church in middle life and took up the tenets of the Plymouth Brethren, more or less, and turned his attention to the composition and publication of religious books, becoming himself a lay preacher. This eventually led to his abandoning, practically, all astronomical work, but his telescope was often used by his eldest son, Dr. C. G. Brodie, during his father's lifetime, and will probably be much more used in the future. Finally, it may be stated that Mr. Brodie was a very capable amateur carpenter, turner, and pyrotechnist, and, besides all that, was a great printer, having set up a large and well-equipped printing-office in each of his successive residences. He was elected a Fellow of the Society on 1855 February 9.

G. F. C.

LOUIS PASCAL CASELLA was born in Edinburgh in the year 1809. His father was a member of an old Italian family, and his mother was the daughter of General Ramsey, of Edinburgh. He was educated at Edinburgh, and at the age of twenty-seven he joined his father-in-law, the late Mr. Tagliabue, as an instrument maker, and eventually succeeded to that business. In the construction of meteorological, surveying, and engineering instruments, Mr. Casella attained a very high excellence, due to his innate intellectual skill and ability, and many important improvements and inventions in scientific instruments were made by him. Two inventions may be mentioned as being always associated with his name: the clinical thermometer, based upon Professor Phillips' maximum thermometer, which was brought into general use by the joint labours of Sir W. Aitken and Mr. Casella; and the adaptation of the pressure gauge to the verification of thermometers for determining the temperature at great depths in the ocean where the pressure per square inch of surface can only be adequately expressed in tons. Mr. Casella did not do much work as an astronomer, but the indirect assistance he gave to astronomy by the excellent meteorological instruments he made has closely associated his name with many observatories. Mr. Casella's benevolence and kindly disposition were well known, and attracted to him wide respect. He died on 1897 April 23, at his residence at Highgate, at the advanced age of eighty-nine years. He was elected a Fellow of the Society 1860 June 8.